



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-7490; Directorate Identifier 2015-NE-40-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Turbomeca S.A. Astazou XIV B and H turboshift engines. This proposed AD was prompted by a report of a crack on the 3rd stage turbine wheel. This proposed AD would require a one-time inspection of the front surface of the 3rd stage turbine for a groove. We are proposing this AD to prevent cracks in the 3rd stage turbine wheel, failure of the engine, in-flight shutdown, and loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-7490; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this NPRM. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-7490; Directorate Identifier 2015-NE-40-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2015-0223, dated November 16, 2015 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During the overhaul of an ASTAZOU XIV engine, a crack was detected on the front face of the third stage turbine wheel between two balancing lugs. The cause of the crack is probably linked to a geometric singularity, likely caused by the transformation operation aimed at introducing expansion slots between the blades during embodiment of Turbomeca mod AB 173. Although there is only one known case of this type of crack, and although it was detected, the possibility exists that additional parts have the same geometric singularity.

This condition, if not detected and corrected, may lead to failure of a turbine blade and its associated piece of rim, possibly resulting in an uncommanded in-flight shut-down and/or release of high energy debris.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-7490.

Related Service Information under 1 CFR Part 51

Turbomeca S.A. has issued Service Bulletin (SB) No. 283 72 0811, Version A, dated August 25, 2015. The SB describes procedures for inspection of the 3rd stage turbine wheel. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of France, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this NPRM because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This NPRM would require inspecting the front surface of the 3rd stage turbine for a groove.

Costs of Compliance

We estimate that this proposed AD affects 9 engines installed on helicopters of U.S. registry. We also estimate that it would take about 5 hours per engine to comply

with this proposed AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$3,825.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Turbomeca S.A.: Docket No. FAA-2015-7490; Directorate Identifier 2015-NE-40-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Astazou XIV B and XIV H turboshaft engines with 3rd stage turbine wheel, part number (P/N) 0 265 25 700 0 or P/N 0 265 25 706 0, installed, if the engine incorporates Turbomeca modification AB-173 or AB-208.

(d) Reason

This AD was prompted by a report of a crack on the 3rd stage turbine wheel. We are issuing this AD to prevent cracks in the 3rd stage turbine wheel, failure of the engine, in-flight shutdown, and loss of control of the helicopter.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) At the next piece part exposure of the 3rd stage turbine wheel or within 1,000 engine hours after the effective date of this AD whichever comes first, perform a one-time inspection for a groove on the front surface of the 3rd stage turbine wheel. Use Accomplishment Instructions, paragraph 4.4.2, of Turbomeca S.A. Service Bulletin (SB) No. 283 72 0811, Version A, dated August 25, 2015 to perform the inspection.

(2) If the 3rd stage turbine wheel passes inspection required by paragraph (e)(1) of this AD, no further action is required.

(3) If the 3rd stage turbine wheel fails inspection required by paragraph (e)(1) of this AD, remove the part and replace with a part eligible for installation.

(f) Installation Prohibition

After the effective date of this AD, do not install any 3rd stage turbine wheel, P/N 0 265 25 700 0 or P/N 0 265 25 706 0, unless it was inspected per the Accomplishment

Instructions, paragraph 4.4.2, of Turbomeca S.A. SB No. 283 72 0811, Version A, dated August 25, 2015.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

(1) For more information about this AD, contact Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0223, dated November 16, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2015-7490.

(3) Turbomeca S.A. SB No. 283 72 0811, Version A, dated August 25, 2015, can be obtained from Turbomeca S.A., using the contact information in paragraph (h)(4) of this proposed AD.

(4) For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on January 27, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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